THE GENESEE FARMER.

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THE GENESEE FARMER.

SATURDAY, MAY 30, 1835.

Notices, &c.

Our thanks are due to EDMUND RUFFIN, Editor of the Virginia *Farmers' Register*, for a copy of the second edition of his "*Essay on Calcareous Manures*," which has just been issued from the press. This edition is greatly enlarged, and will be noticed more at length hereafter.

We are indebted to some unknown friend for a copy of the annual volume issued by the *Essex* [Mass.] *Agricultural Society*, embracing its proceedings for the year 1834, from which we shall hereafter make some extracts for the Farmer.

The communication of *Ulmus* came to hand too late for this week. It shall appear next week.

"*Anti-Dog*," whose communication is too personal for publication, informs us that a gentleman of Marcellus recently had fifteen fine sheep killed in one night by the dogs, and about twenty, more or less wounded.

"*Fessenden's Practical Farmer and Silk Manual*," is the title of a monthly sheet, the first number of which has just been issued. It is made up of selections from the New-England Farmer, and is published at 50 cents a year.

On Fertilizing Land.

On passing by the site of an old dwelling house which was demolished many years ago, we were struck with the remarkable fine appearance of the wheat which grew on this spot. According to our estimate, it will produce several times as much as any other equal space in the field; and the same extraordinary fertility is exhibited every year whether it be in grass or in grain. This is not the only instance that we have seen of the kind: many such places may be found; and we think it would be well for cultivators to consider and to endeavor to discover the causes of such important results. Though the means for rendering a whole farm equally productive, be not easily attainable, yet we are persuaded that much more may be profitably done on most farms, than is now doing.

This house, which was built of logs, had been inhabited about ten years. It was then demolished; and if we may judge from the effects of log heaps on lands generally, it must be a matter of little consequence to inquire whether they were burnt or removed. About twenty years have now passed away, and there it is, the same green spot. Such durable effects do not generally proceed from a *burning*, or from *putrescent manures* dropped round the door by the pigs, cattle or poultry. We must therefore inquire what other materials had been collected. There was *chip-dirt* in no sparing quantity, and probably some *burnt clay*. To these we may add a liberal supply of *ashes*, mixed with a portion of *quick-lime* which had been used in making soap, besides pieces of *horns*, *hoops*, *bones*, and *old leather*. *Charcoal* had also accumulated.

Now what is the inference to be drawn from these facts? We should say let every farmer carefully collect all the chip-dirt that he can from his wood-pile; all the ashes and lime from his leach-tubs; all the horns, hoops, broken bones and old leather, more or less of which may be found every year on every farm,—and then have them all duly applied to his fields. If this be done the consequences must be important. The principle of saving, of letting nothing go to waste, ought no more to be forgotten or overlooked on a farm than in a manufactory. The Scotch say, "Many a little makes a mickle," and this proverb is the dictate of experience and sound sense.

We hope none of our readers will think that we are dealing too much in trifles. Those who throw refuse coal into the roads or streets, instead of removing it into their fields or gardens; and those who *mend* the roads with manures from their stables or woodpiles; or cart old lime or mortar into them for the same purpose,—would doubtless carp at us were it not for one circumstance: we have never known such *economists* to take an agricultural paper.

Remarks of a Traveler.

From one of our agricultural friends who is now traveling, we have received the following paragraphs which he has transmitted by mail. The first two are dated at Ithaca on the 12th inst.

On Draining Land.

"I have seen no fields of wheat on my journey from Auburn, which are so forward and promising as some in this neighborhood. I ascribe it chiefly to the particular situation of the land, which is naturally well drained. The cold rains and melting snows of spring, are quickly discharged, and have no opportunity to soak the ground to the great damage of the crop, as in many fields of more level surface and greater fertility which lie in the limestone district of the north. I would not say indeed that this drainage fully compensates for the thinner soil, but it comes much nearer to that point than many of our farmers seem to be aware of. Encourage them to remedy the omissions of nature. She has limed our fields for us—a most important operation, but has left us to do the ditching for ourselves, an operation also of great importance."

The Prospect of Peaches.

"The Peach trees in this village and its neighborhood are now in full bloom; and appear to have lost but few, if any, of their blossom buds. The damage that they have sustained indeed, has been very different in different places. At Auburn I was told by an attentive observer, the proprietor of a fine fruit garden, that his trees had lost about one fourth of their buds; but another horticulturist in a different part of the county, believes that his have lost more than nine-tenths. Under the trees in some places, the ground was nearly covered with buds that had swelled without opening, and then dropped off.

Scarcity of Sheep.

"On this route, from the heights above Ithaca to the Great Bend, Belmont and the Pocono mountains, I have observed but very few sheep; and have been told that most of their flocks were purchased last fall and driven off. It would be difficult to thin the flocks of our district to the same extent; for our farmers could not be tempted by any such bribes to do without sheep. If all that I have seen in traveling one hundred miles were congregated, they would form but a mere beginning when compared with some single flocks in my neighborhood."

Scarcity of Fodder.

"Hay and oats through this region, bear a high price. The latter article in some places is very scarce; and I was told it was not to be had. I have never before seen so many cattle look so miserably poor; and was assured that in one neighborhood, a number had died of absolute starvation. The grass is very backward, and full three weeks later than in the vicinity of our lakes."

The Wild Service Tree.

"The Service tree (*Aronia botryapium*) is now in bloom, and even in the valley of the Susquehanna, it is at least a fortnight later than in Tompkins county. It is an elegant *tree*, (for it is sometimes found more than *eighteen feet* high) though we have seen some loaded with flowers scarcely more than two feet. It would prove a great ornament to shrubberies, as the earliness of its flowers renders it a very conspicuous object at this season of their foliage. The colors vary,—some being of a pure *white*, while others are of a delicate *blush*. It would be hard to obtain such varieties however, without grafting; and even then on account of the difficulty of transplanting it with success, except when it is very small. In those that I have removed there were a few roots (perhaps not more than three or four) which descended into the earth like *tap-roots* with scarcely any lateral fibers at the depth of the spade; and apparently for this reason, though I have transplanted several, I have never fully succeeded with one; but doubtless if it were annually or biennially removed in the nursery, this difficulty might be overcome."

Wool Growing.

Dr. Leonard Jarvis of Claremont, (N. H.) lately sold 18,000 lbs. of Wool, all of his own raising, for which he received about $14,000. "Such results," remarks the editor of the Baltimore Farmer, "are encouraging, and calculated to induce those who own farms favorably located, to enter into the business; but the prudent farmer will, of course, make his calculations, and take a full view of the advantages and disadvantages, outlay of capital in sheep, expense of keeping them, per centum of mortality, and all the other drawbacks upon profit, before he ventures on a change."

From the New England Farmer.

Culture of Corn.

Mr. Fessenden—About two years since I gave you some account of two experiments in planting corn. The result of one went to show that our cornfields do not usually have a sufficint stock of plants; and the other, that nothing is gained by giving the hills a greater distance one way than the other. On the latter point perhaps the practice of farmers in this vicinity is different from that of others. Here we see fields planted, with rows from two and a half to three and a half feet distant, and hills from four to six or seven feet distant in the row, thereby making the distance nearly, and in some instances more, than double one way than it is the other. The origin or reason of the practice I have never learned, but see no objection to it, except the additional labor necessary in cultivation. I believe it is moderately getting out of use. Respecting the first, that of stocking the ground, I have since made further experiments both in regard to distance between hills, and number of stalks in a hill, and if you think its details may be useful or interesting to your readers, it is at your service.

Corn is usually planted here in hills, and the general impression among farmers, I believe, is, that without reference to the distance between hills, it is a matter of little consequence whether there be three or four stalks in a hill. Perhaps the majority prefer four stalks, yet some good farmers give the preference to three, and three are probably as many as our cornfields will usually average, if the missing hills are taken into the account.

The ground selected for the experiment, was a light sandy loam, that had been in pasture perhaps thirty years. After ploughing and rolling, about twenty cart buck loads to the acre, of coarse barnyard manure were spread on the furrows and harrowed in. Five parcels of ground, of three rows each, were then laid out at the several distances, of 2 feet 6 inches, 2 feet 9 inches, 3 feet, 3 feet 3 inches, and 3 feet 6 inches, each parcel separated by an intermediate row, to prevent the necessity of resorting to an average on the outside rows, in calculating the product of the ground per acre. The distance between the hills in the row was, in all cases, equal to the distance between the rows of the same parcel; and in each parcel one row was to have three, one to have four, and the other to have five stalks in a hill. The rows, about twelve rods in length, were laid out, and the hills marked off, at exact distances, with little trouble, by means of a simply constructed gage. The corn planted was an early twelve rowed kind, called the Golden Sioux. Six to eight kernels were put in a hill, and the stalks afterwards pulled out to the requisite number; in all cases leaving the best ones standing, which gave some advantage in the selection, to the hills of smallest number. The intermediate rows, and those on either side, had generally about four or five stalks in a hill, with hills at distances to correspond nearly with their neighbors. In the selection of soil, manuring and cultivating, all were supposed to have an equal chance. The ground was kept level, and sowed with grass seed the last time of hoeing.

When harvested, the produce of each row was carefully weighed in the field, and noted down immediately, and seventy pounds of dry well ripened ears estimated to make a bushel of shelled corn.

The following table will show the order in which the rows were planted, and perhaps will exhibit the method pursued and the result, better than can be done by description; and also afford opportunity to detect any error that may have been admitted in the estimates.

(*For table see head of next column*)

It will be seen in every case that the hills of three stalks produced less than those of four, and those of four less than those of five. In this view it may be considered as five experiments, all giving the same result, notwithstanding some of the hills occupied but about half the quantity of ground usually given them in our field culture.

No.	Distance.	Ground to each hill.	Hills per acre.	Hills in row.	Stalks per hill.	Product of row.	Produce of hill.	Shelled corn per acre.
1	2 ft. 6 in.	6 ft. 3 in.	6970	80	3	47 lbs.	9 oz. 6¼ drms.	54 bus. 44 p.
2	"	"	"	"	4	49 "	9 " 12¾ "	56 " 67 "
3	"	"	"	"	5	52½ "	10½ "	60 " 74 "
3	2 ft. 9 in.	7 ft. 6¾ in.	5760	72	3	48½ "	10 " 12¾ "	51 " 56 "
4*	"	"	"	"	4	53 "	11 " 12¾ "	56 " 41 "
5	"	"	"	"	5	55 "	12 " 3¾ "	58 " 48 "
6	3 ft.	9 ft.	4840	66	3	48 "	11 " 10¼ "	46 " 70 "
7	"	"	"	"	4	54½ "	13 " 3¾ "	53 " 20 "
8*	"	"	"	"	5	56 "	13 " 9¾ "	54 " 56 "
9	3 ft. 3 in.	10ft. 6¾ in.	4124	60	3	43 "	11 " 7¾ "	39 " 31 "
10	"	"	"	"	4	48½ "	12 " 15 "	44 " 34 "
11	"	"	"	"	5	55 "	14 " 10¾ "	50 " 30 "
12*	"	"	"	"	4	46 "	12 " 15 "	42 " 43 "
13	"	"	"	"	5	55 "	15 " 7 "	50 " 30 "
14	3 ft. 6 in.	12 ft. 3 in.	3556	57	3	46 "	12 " 14¾ "	35 " 18 "
15	"	"	"	"	4	55 "	15 " 7 "	45 " 56 "
16*	"	"	"	"	5	56 "	15 " 11 "	46 " 43 "

* Intermediate or dividing rows.

The average of five rows, one from each parcel, is as follows, viz:

Three stalks in a hill, 46 bushels 14 lbs. per acre.
Four stalks in a hill, 52 bushels 42 lbs. " "
Five stalks in a hill, 54 bushels 20 lbs. " "

The difference of average between three and five stalks is 8 bushels 6 lbs. per acre.

It will be seen also, that in every instance but one, or eleven times in twelve, diminishing the distance between the hills increased the product of the ground. The average of each parcel is as follows, viz:

Three feet six inches between the hills gave 44 bushels 14 lbs. per acre.
Three feet three inches, 44 bu. 57 lbs. per acre.
Three feet, 51 bu. 49 lbs. " "
Two feet nine inches, 55 bu. 45 lbs. " "
Two feet six inches, 57 bu. 36 lbs. " "

The difference of product between the average of hills at 2 feet 6 inches, and that of hills at 3 feet 6 inches, is 13 bushels 22 lbs. per acre.

Row No. 17 had the least number of stalks per acre, and gave the smallest product, 38 bushels 18 lbs. The number of stalks in this row per acre, (for there was not one missing,) was probably equal to the number usually standing in our fields, and the product would be considered, in common seasons, a fair crop for land and manure of like quantity and quality. Row No. 3 had the largest number of stalks per acre, and gave the largest product, viz: 60 bushels 74 lbs. This difference appears to have been made by the difference in the number of stalks, as is evident from the fact that the produce of the other thirteen rows varied from these, and from each other in different degrees, somewhat according to the number of stalks, and distance of hills, with one exception. No. 14, with hills (of four stalks) at 3 feet 3 inches distant, gave 1 bushel 22 pounds less than No. 18 with hills (of four stalks) at 3 feet 6 inches distance. This exception to the general result is a case in point showing that the same crop is not always and in all cases to be expected even from the same soil, season, and mode of culture; and gives evidence, if such be wanted, that a single experiment should not be relied upon as fully establishing any rule or method of cultivation.

Row No. 17 gave a product equal to 22 bushels 56 pounds per acre more than Row No. 3, or, a gain of about sixty per cent., apparently by increasing the number of plants per acre. Perhaps a part of the gain, however, is only in appearance. Most likely a hill with five stalks would extend its roots in search of food somewhat farther than a hill with four or three stalks, and if so, among weaker neighbors it would occupy more than its allotted portion of ground, while they would occupy less than theirs. If this be a cause of part of the difference, it may be difficult to tell how much deduction should be made, (though probably whatever is made should be from the 8 bushels 6 pounds difference of product between three and five stalks,) but having the facts before you, Mr. Editor, you or your readers can guess as well as myself whether, after making a liberal allowance for that or any other supposable cause, there was not a large and substantial gain by increasing the number of stalks per acre.

That the gain would have been as great on all other soils, I am by no means prepared to say; indeed, on many I am confident it would not. I apprehend it is only rich and good soil, well adapted to the growth of corn, that will bear thick planting, and even then very much depends on the *kind* of corn; that of larger growth must have more distance. Cold land, perhaps, will not bear the shade of thick planting, and poor light land most certainly will not bear the exhaustion. Thick planted corn also suffers soonest and severest by drouth.

I have stated the case perhaps with more minuteness than may be thought necessary, and shall leave it with you, Mr. Editor, to strike out all or any part, as you shall think best.

During the past year much has been said in the Farmer, by way of objection, to large corn cobs—a popular objection, surely; but will you tell us, Mr. Editor, why a large cob is not as good as a small one; or, what is about the same thing, why a long one is not as good as a short one, and whether we may not as well expect to raise beef without bones, as corn without cobs? I have supposed that the larger and longer the ears were the better, provided the corn was of good quality, and adapted to the seasons and soil; with these qualifications, far from having seen them too large, I have seldom thought them large enough, and should be very unwilling to assign them a limit. Indeed, I see not why the objections that can be made to large ears of corn should not be made to large ears of rye or wheat, or to the large long frames of "Improved Short Horns." But I may be mistaken; I may misapprehend the subject.

Yours respectfully,

William Clark, Jr.

Northampton, May, 1835.

[*By the Editor.*]

The above article cannot fail to prove of great utility to the practical farmer, and we think that Mr. Clark has rendered important services to the community of cultivators by making and publishing the results of the experiments detailed above.

Washing Sheep.

It may seem somewhat early in the day to think or say any think upon this subject, when the hills and the mountains on our frontier look so much like January, and the clouds and the air look and feel more like November than lovely smiling May. But in all probability the time is not far distant when sheep must be sheared, and ought previously to be washed. By *washed*, we mean what the word was originally designed to mean—a thorough purification from all dirt and extraneous matter by *water*, not a mere sopping in a mud puddle, and then a drying upon a sand bank. But to be serious. The state of Maine annually suffers a severe loss by neglect in washing the wool upon the sheep as it ought to be. Many seem to think that the more dirt they can sell the more gain. No such thing. Saying nothing of the iniquity of the thing, it is exceedingly injurious to the reputation of the wool-grower. The buyer looks narrowly at the quality and cleanliness of the fleece, and he makes up his mind accordingly. If it be clean he will give a fair price, if it be dirty he makes a deduction, and always enough to bring the seller a loss on the actual value of the wool.

We earnestly hope that our wool-growers will see to this thing, and endeavor to have their fleeces in the finest state possible for the market.

There seems to be an indication now, that the manufacturer is willing to give a fair price for fleece wool, and it is no more than just that the wool-growers should meet him in as fair a manner; with a good well washed article. By so doing the buyer will be the gainer, the seller will be the gainer, the state will be the gainer—all will be gainers.—*Maine Farmer.*

Bees and Bee-House.

The use of *houses* for bees, we believe, is of modern date. Some three or four winters ago, in traveling in Otsego county, we were shown the first bee-house we ever saw or heard of. One was four, and another six feet square, and six or seven feet high, made perfectly tight, with a good floor, and with a door for occasional entrance. One had been tenanted two summers, and contained probably about 200 lbs. honey. The other had been occupied but a season, and contained less honey. Neither had sent out a new swarm. We were so pleased with this management, that immediately on reaching home we had a *Bee-House* built, and in June following introduced into it a swarm of bees the day they left the parent hive. They filled the hive in which they were introduced, but no more, and the next year sent out two swarms. In the mean time we made a bee-house, or bee-room, in our garret, adjoining the eastern brick gable end, fitted the interior for the reception of a hive, and opened an aperture through the wall at the point parallel with that where the bottom of the hive would stand. The first swarm that came forth were placed in it. They not only filled the hive, but nearly covered it with comb and honey the first season. We have taken from their stores a considerable quantity of honey for our table, always delicately white and fine, which has been more than made good the following summer. The quantity of honey in the room must now amount to nearly 200 lbs. No interruption to their labors has been apparent, nor have they sent out in the three summers any new swarm. We built another bee-room in the garret last summer, and put therein a fine swarm of bees. They promise to do equally well with the first. A bee-moth has been occasionally seen in the garret, and one in the bee-house, but not the least indication of their web or larvæ about the hive or honey.

It has been said, that where there are a number of hives, the bee-moth concentrate in one hive, and leave the others undisturbed. This has been in a manner verified by our observation during the two last years; for we have, in both years, found one hive almost literally filled with the worm, butterfly and web, which we immediately consigned, hive, honey and all, to the flames; but have not found a moth, or the signs of one, in other hives from which we have taken honey. Though it is well to remark, that the honey has been uniformly taken from the uppermost of a double hive, without destroying the bees, which were driven into the lower apartment. The two boxes are of equal dimensions. A hole is made in the top of the lower one, for the bees to pass up, and the upper box set on, and fastened to the lower one by hooks and buttons. The upper box is always filled first, and when the under one is filled, and this is considered sufficient to subsist the bees during the winter, the upper box may be taken off, the honey, which is found to be pure, and free from young and bee bread, taken out, and the box returned. The bees are driven into the lower apartment by blowing tobacco smoke into the upper one.

In November last, we took two late swarms, which appeared to have scanty supplies for the winter, and placed them on a shelf in a dark cellar. About the 20th March they were examined. The bees in one hive were dead; they had been apparently smothered for want of air or by bad air. Water had got under a corner of the hive and produced moldiness. The honey had apparently suffered no diminution during the winter. The bees in the other hive were in good condition; not a dead one was seen; and on being removed to the stand, the day being warm, soon became lively. From this experiment, we think weak swarms may in this way be preserved during the winter in a dormant state.

In preparing a bee-house, we recommend that the hive which is to be put into it with the young swarm, for such we should prefer, be placed above the center on the east wall, that the aperture through the wall, for the egress and ingress of the bees, be parallel with the bottom of the hive, and that the staging on that side to sustain the comb, be fifteen or eighteen inches broad. The comb, when extended on the outside of the hive, assumes the form of a cone, the top of the hive constituting the apex, spreading below equally on the front and sides, and extending considerably below the hive. Without a broad staging, therefore, the comb in front, having nothing to sustain it, breaks off from its own weight, and falls to the ground.—*Cultivator.*

From the Edinburg Quarterly Journal of Agriculture.

On the Preservation of Potatoes

OVER THE YEAR.

As the best mode of preserving potatoes until the produce of the next year's crop should be brought into use, is a matter of considerable importance, I beg to refer to vol. 22d, p. 135, of the Transactions of the Society for the Encouragement of Arts, &c. where is detailed the following method adopted with success by M. J. De Lancey, Guernsey.

M. De Lancey says: "Early in March, 1803, I observed my winter's stock of potatoes, which I had dug in October, 1802, sprouted from the mildness of the weather in this island. I accordingly took indiscriminately from my pile about 3 dozen, and in my court-yard dug a hole two feet and a half deep, under the protection of a south-west wall, where the rays of the sun prevail for a few minutes only during the day, at any season of the year. Then, with three pan-tiles, one at bottom, I laid most of my potatoes in the hole, and placed the other two tiles over them in form of the roof a house. They not containing all, I threw the remainder carelessly into the hole, (having no great confidence in my experiment,) covering the place over to its usual level. Business calling me home during part of the summer, I neglected looking after my small deposit; but, on the 21st January, 1804, nearly 11 months after covering them, I had the curiosity to examine them, when, to my astonishment, I found them, (two or three excepted, which were perforated by the ground worm, though firm,) all perfectly sound, without having in the least vegetated in any respect, fit for the purpose of sets and the use of the table, as I have boiled a few, and found them similar in taste and flavor to new potatoes. I further pledge myself that they were perfectly firm. I have still some of them by me for the inspection of my friends, who all agree that they are so."

In another letter, dated 17th May, 1804, M. De Lancey says: "I avail myself of the opportunity of a friend going to London, to send three of the potatoes, as a confirmation of their being fit for sets, as they are actually sprouting. The potatoes I send I pledge myself are of the growth of 1802." Then follows the certification of the Secretary to the Society of Arts: The above potatoes were examined before a Committee of the Society on the 30th of July, 1804, and found to be in a state fit for vegetation."

From the above experiment, it is evident that *vaults* or *deep trenches*, out of the reach of atmospheric influence, would effectually retard the growth or sprouting of the potatoes during the period of about *twenty-one months*; that is, from the time of taking up in October, till the 30th of July in the *second year*, or say at least *eighteen months*,—and we have here a period of time three times longer than would be sufficient to fill up the interval betwixt the old and the new crop of potatoes.

It is probable, that potatoes for deferred use, say from April to October, would be more safely deposited in January or February than at an earlier period; for it cannot be doubted that, when just taken from the field, they possess a succulence and moisture rather inimical to sound storing in large quantities, besides which the examination and removal of damaged sets would contribute much to the security of the deposited heaps. If we can preserve ice from melting, we can surely keep potatoes from sprouting; and the latter is undoubtedly an object of much greater importance than the former. Trenches or vaults would probably require three or four feet of covering of mold, besides all the advantages that can be gained by selection of a situation not less exposed to the sun; and if the potatoes deposited were formed into breaks or divisions of five, ten, or fifteen polls, according to circumstances, with intervening partitions to prevent the access of air, there is little doubt, that by well contrived and well constructed vaults or trenches, potatoes may be kept in excellent conditon, from the beginning of April till the end of October for domestic purposes, as well as for the use of horses and cattle. G.

Animalized Carbon--a New Manure.

This substance is of French origin, and its manufacture is secured by patent. It was discovered by a French chemist; but that it is a substance easily manufactured may be inferred from the fact of its being shipped free on board at 35*s.* per ton. Mr. Joseph Owen, of Copenhagen, acquired the knowledge of the manufacture from the patentee in France, and has since established a manufactory on his own account in Copenhagen. His traveler, a Danish gentleman, was the first to introduce this new manure to the notice of the Scottish agriculturists. We have not had an opportunity of seeing a sample of it, but it seems it has been tried last year by Mr. Dalgairns of Ingliston, and Mr. Inches of Cardean, who, we hope, will favor us with their opinion of its efficacy. We understand that the Danish gentleman has disposed of 250 tons of it in the counties of Forfar and Kincardine. Mr. Owen's card gives the following account of its nature, and the mode of using it:

"The chief excellency of this manure is, that it is powerful in its effects, occupies but little room, is easily separated, and conveniently used either by hand or drill; its effects are farther to ensure a rich crop, by gradually ameliorating the soil, and rendering fallowing unnecessary. For wheat, rye, buckwheat, barley, and similar descriptions of corn, about 8 cwt. 1 qr. 16 lbs. is used per acre; It may be either broadcast or drilled in before harrowing. For flax, hemp, beet, potatoes, &c. about 10½ cwt. per acre; and 12 cwt. 2 qrs. 10 lbs. per acre for artificial meadows, different sorts of cabbage, rape, culinary plants, and for refreshing natural meadow land. For plants that are set in rows, a handful is put to each plant; for those which are transplanted, a child follows the planter, and throws a very small handful of the manure into each hole, which is immediately covered over with earth; in several places for rape, it is scattered out in rows along the roots of the plant, which the plough covers by forming a new furrow. On meadow land it must be spread out in December or January, when the snow is not on the ground. Generally speaking, it is well to mix the manure with half its quantity of finely sifted earth; but there is no necessity for pursuing this method. On light and warm soils about 2 qrs. 22 lbs. less per acre is used than on cold or clay lands, where and extra 2 qrs. 22 lbs. are added to the quantity as before-hand directed to be used; it is in fact left to the farmer's judgment to make use of the above directions, according to local circumstances. What characterises this manure most is, that it develops its effects so slowly and gradually, that it may be applied without danger in contact with the seed or roots of plants; in this it differs from a number of other manures, which are less rich, but more heating. In Scotland it has been tried in 1834 on eight different soils, has been found nearly equal to bone-dust for turneps, and has since been ordered in large quantities from the manufacturer, Mr. Owen, at Copenhagen, who delivers it free on board at 35s. per ton."
—*Editor Q. J. A.*

COMMUNICATIONS.

On Raising Cucumbers, &c.

BY W. W. E.

A friend of mine gave me a description of a mode of raising vines, which I should think very excellent, and intend to try it this season. It is as follows:

Prepare your ground for the hills in the usual way; place a barrel without heads on the ground, and fill it with fresh stable manure; around the bottom of the barrel, within a few inches of it, plant the seeds. The manure warms the ground and keeps it moist. As the vines come up and begin to run, a little water is occasionally poured into the top of the barrel, which leaches through the manure into the ground, and supplies the plants with moisture and aliment. It looks reasonable that the plants must have a luxurious and rapid growth. A few hills prepared in this way are said to yield an abundant supply of fruit.

Hammondsport, May 10, 1835. W. W. E.

Double Anemone Thalictroides.

BY W. W. E.

This humble flower is one of the most attractive of our native plants, but like other natives is seldom found double; its petals vary from five to eight or ten, even then it is a pretty plant, but when its petals are so multiplied as to nearly fill its disk, it is then very beautiful. We have a double one growing in the garden, which we found in its native wilds two or three years since, and which we highly prize. It has much improved by cultivation, and well repays the fostering care that is bestowed upon it. We have increased it considerably by separating its roots, which are planted on the hyacinth bed. Interspersed among the hyacinths of various hues, whose loftier stems overshadow it, with its little flowers of delicate pink and white, it presents a beautiful appearance. There is one singularity about it worthy of notice: on the same plant and stem, there will be double, semi-double, and single flowers; the principal flowers in the center of the stem being sometimes very double, while those around them are partially double and single. We have just plucked a flower which has 50 petals, from a stem which has other flowers of but 8 or 10. In every choice collection of the florist, we deem this worthy of a place. W. W. E.

Hammondsport, May 15, 1835.

Hoven Cattle.

BY R. M. W.

As with our judgments, so with our watches; *none*
Go just alike, yet each believes his own.

Mr. Tucker—I do not know that Daniel Longstreth is mistaken in his treatment of hoven cattle, but I should certainly hesitate about stabbing a valuable creature. I think Holkham's expedient much safer, if we could be sure that his leather tube would certainly go through the gullet into the stomach; but as it may reach the lungs and produce death, I have my doubts of its infallibility. The aqua ammonia, or spirits of hartshorn,—one gill to a pint of water,—has never failed with me where the disorder was occasioned by eating fresh clover; but in cases of eating frozen turneps, &c. the cause is very different, and requires a different treatment.

Yours, R. M. W.

Rotation of Crops, &c.

BY R. M. W.

Mr. Tucker—In your Farmer of 9th of May, I notice some remarks of L. F. Allen, Esq. on rotation of crops, &c., which I think puts at rest all pettifoging on this subject. The observation and discernment of Mr. Allen leave little doubt of its accuracy.

I have before stated as my opinion, that this doctrine of rotation of crops was more fanciful than true; and that the doctrine of excrementitious deposition by the roots of plants, of a poisonous substance in the soil, was an absolute absurdity. The remarks of Mr. Allen corroborate my views fully on this subject; and my only surprise is, that so much good sense could have found its way to the public, when ravings seem to be the fashion. It is happy for mankind that truth is powerful and will work its way, even though error and conceit may for a time oppose its progress. Yours, R. M. W.

Animal Instinct.

BY R. M. W.

"God is the soul of brutes."

Mr. Tucker—I observe Mr. Longstreth hints at the old doctrine that brutes have something like *reason*. His cow waiting *to be stabbed*, would seem to indicate something like reason. We have many such recorded of the dog, elephant, &c. which give much color to the doctrine; yet our best authors think they can discern a great difference between instinct and reason. Addison in the Spectator, has treated the subject at great length, and with ability, and comes to the conclusion at the head of this paper; and I think his numbers from the country residence of his friend, Sir Roger De Coverly, may be considered with advantage by those who are curious to understand the difference between instinct and reason.

There are probably many other authors, but none that I have seen who have treated it more understandingly. R. M. W.

Draining.

From "Elements of Practical Agriculture," by David Low, Professor of Agriculture in the University of Edinburgh.

Principles to be ever kept in mind by the tillage-farmer are to keep his land dry, rich and clean. The first in the order of these principles, and an essential one to be regarded in cold and humid countries, is to keep the land dry.

While a certain portion of water is essential to vegetation, an excess of it may prove greatly injurious. In the colder countries an excess of water is one of the main causes of infertility, and a primary object of the husbandman there is to carry it away from the ground.

The water which falls from the atmosphere does not sink to an indefinite depth or to a great depth in the earth. It is either retained at or near the surface where it falls, and whence it is evaporated, or it finds its way to a lower level, by channels upon the surface, or in chinks of rocks, or beds of gravel, sand and other permeable substances beneath the surface.

The purpose in draining is when water stagnates at or near the surface, or when, having penetrated to pervious substances below the surface, it is finding its way to a lower level, to confine it to a determinate channel, and carry it away by some convenient outlet, in order that it may not overflow or saturate the soil.

The substances through which water finds its way with facility are the looser earths, sands, and gravels, the crevices of rocks, and beds of loose or decomposing stones: the substances which resist its progress are clays and the harder rocks.

When the soil rests on a retentive subsoil, whether of clay or previous rock, it forms a species of reservoir for water, absorbing and retaining it. The object of the drainer in such a case is to give egress to the water in fixed channels or drains. This is partly effected by the common ditches of the farm, partly by the open furrows of ridges always described; and, when these are insufficient, by cutting trenches in the hollows, or where best suited to effect the purpose. These trenches are either left open, or they are filled to a certain depth with small stones or other substances, through which the water may percolate; and then they are covered again with earth and soil, so that the plough may pass over them in tillage.

When water overspreads the surface, or is absorbed by the soil, and is unable to penetrate to the looser strata below, the carrying it away in channels is termed *surface-draining*. When it has already penetrated into the earth, and is contained in reservoirs there, or is finding its way to a lower level through permeable substances below the surface, the confining it to a fixed channel is generally termed *under-draining*. These two purposes of the drainer are constantly combined in practice, but yet they are in some degree distinct. It is the intercepting of water below the surface that constitutes the most difficult part of draining, and which requires the application of principles which it is not necessary to apply in the case of surface draining.

If we shall penetrate a little way into the looser portion of the earth, we shall generally find minute stratification, consisting of gravel, sand, or clay, of different degrees of density. These strata are frequently horizontal, frequently they follow nearly the inclination of the surface, and frequently they are broken and irregular. Sometimes the stratum is very thin, as a few inches in thickness, and sometimes it is several feet thick; and some times the traces of stratification disappear, and we find only, to a great depth, a large mass of clay or other homogeneous substance.

When these substances are of a clayey nature, water finds its way through them with difficulty; when they are of a looser texture, water percolates through them freely. These, accordingly, form the natural conduits or channels for the water which is below the surface, when finding its way from a higher to a lower level.

When any bed or stratum of this kind, in which water is percolating, crops out to the surface, the water which it contains will flow out and form a burst or spring, oozing over and saturating the ground, as in Fig. 1, which represents a section of the ground, from C to D.

When water is, in like manner, percolating through one of these pervious strata, and meets any obstruction, as a rock or bed of clay at A, Fig. 2, it is stopped in its progress and, by the pressure of the water from a higher source, it is forced upwards, and then saturates the superjacent soil, as from D to E, forming springs, or a general oozing.

In either of these cases, and they are the most frequent that occur in practice, the object of the drainer is to reach the water in its subterraneous channel before it shall arrive at the surface, and to carry it away in a drain.

By cutting a drain at A, Fig. 1, the water of the stratum of sand CE, is cut off before it reaches the surface at C, where it forms a swamp CD.

In like manner, in Fig. 2, by forming a drain at C or F, the water is cut off in its channel AB, and thus in relieving the pressure from the higher source, by giving egress to the water through the drain, the cause of the wetness from E to D is removed.

In looking at the sloping surface of any tract

Fig. 1.

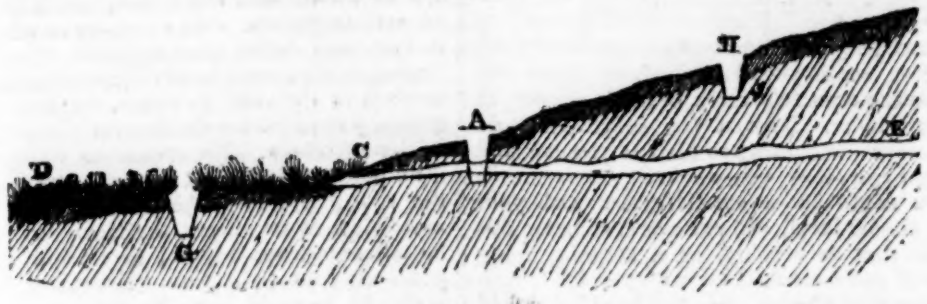


Fig. 2.

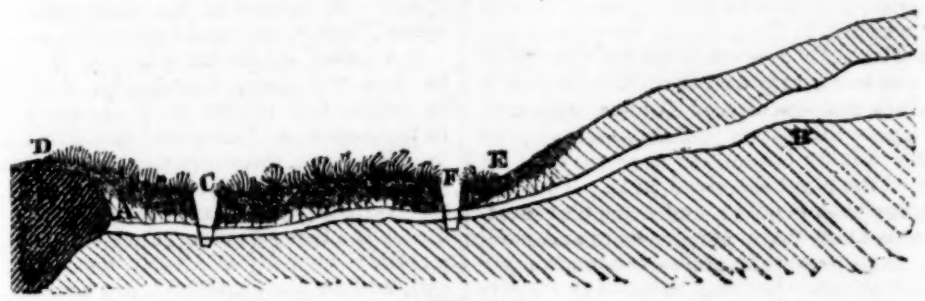


Fig. 3.

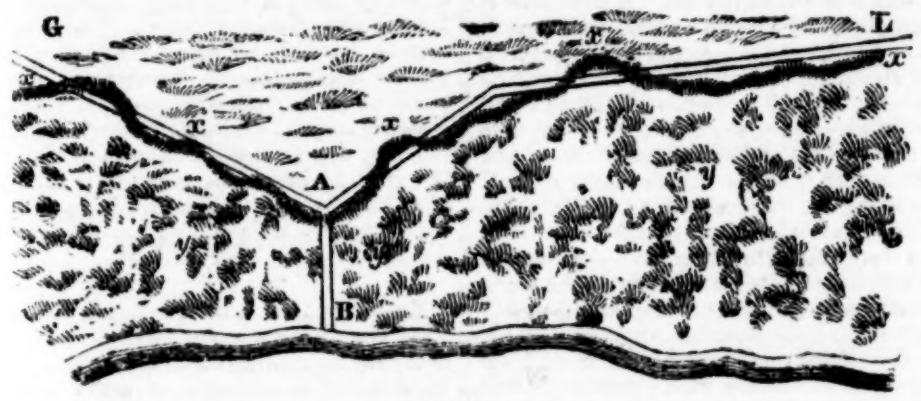


Fig. 4.

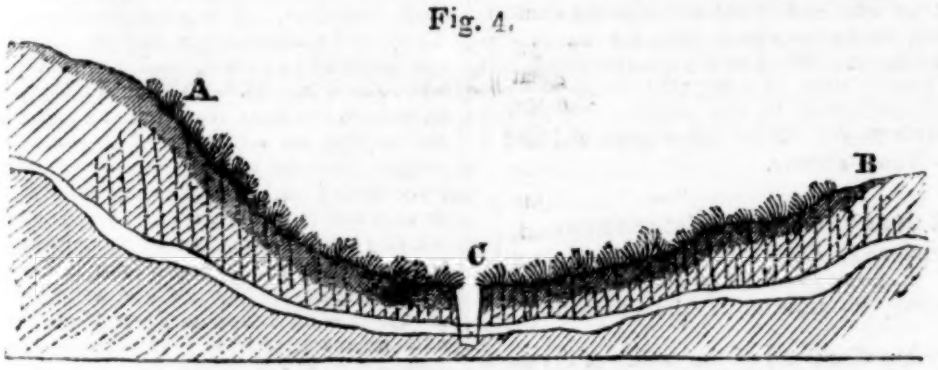
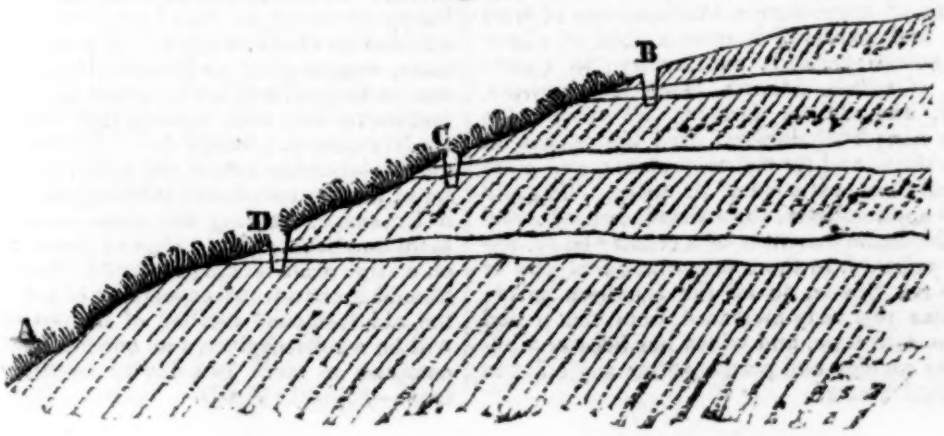


Fig. 5.

Fig. 6.



of ground, as a field, in which there is an oozing or bursting out of water, we shall generally distinguish the line where the wetness begins to appear on the surface, extending over a considerable space, *x x x x x*, Fig. 3, the effects appearing in the wetness of the ground farther down the slope, as *y y y*. The line where the wetness begins, and which is generally rendered perceptible by the change of color of the soil, the tendency to produce subaquatic plants, and other indications of wetness, marks for the most part nearly the course which the line of the drain should follow. By cutting a drain nearly in this line, as from G to A, and from L to A, sufficiently deep to reach the porous stratum in which the water percolates, we shall intercept it before it reaches the surface, and by carrying it away in some convenient outlet, AB, remove the cause of wetnesses.

This accordingly forms, in the greater number of cases, the rule adopted in practice for the laying out of drains upon the surface, the line is drawn nearly at or a little above, the line of wetness, or, to use the common expression, between the wet and the dry.

Should the line of drain be drawn too much below the line of wetness, as at G, Fig. 1, then the trench would fail to intercept the water; and further, if it were filled with earth, stones and other substances, in the way to be afterwards described, the whole or a part, of the water would pass over it, and the injury be unremoved.

Again should the line be too much above the line of wetness, as at H, the drain would fail to reach the channel of the water, and so would be useless.

It is for this reason that, in common practice, the rule is, to draw the line of the drain nearly between the wet and the dry, or a little above it, taking care to give it the necessary descent, and to form it of sufficient depth to reach the pervious bed or stratum in which the water is contained.

But as water may arrive at the surface in different ways, and the wetness be produced by different causes, so variations from this rule of lining out the drain may be required, and the judgment of the drainer is to be shown in adapting the course of his drain to the change of circumstances.

Some times, in a hollow piece of ground, feeders may reach the descent, as in Fig. 4; and the water may be forced upwards by the pressure from each side of the hollow, and thus form the swamp from A to B. It may not be necessary here to cut a trench on each side along the line of wetness at A and B; a single trench C, cut in the hollow, and giving egress to the water, may relieve the pressure and remove the swamp.

Sometimes upon a sloping surface, one pervious stratum, in which water percolates, may produce more than one line of springs, as B and A, in figure 5. Here a single drain cut at B will remove the cause of wetness at both swamps, without the necessity of the drain at A.

And, in practice, it is well to wait to mark the effects of a drain cut in the higher part of the slope to be drained, for these effects often extend further than might be anticipated, removing springs, bursts, or oozings, at a great distance.

On the other hand, a single swamp, as from B to A, in the figure 6, may be produced, and yet one drain at B may be insufficient to remove it. In this case, the water being brought to the surface by more than one channel, it is necessary to form several drains to reach the several beds in which the water is contained, as at B, C, and D.

These examples will show, that one rule, with respect to the laying out of drains, is not applicable to all cases, but that the drainer should adapt his remedy as much as possible to the cause of injury. One object, however, to be aimed at in all cases of under-draining, is to reach the bed, channel, or reservoir, in which the water is contained.

From the New York-Farmer.

Salting Flowers.

It is asserted by a distinguished writer of great antiquity, that "he may conquer all things who mingles the useful with the sweet." It may not

be generally known, that common salt applied to flowers will preserve them with nearly all their peculiar odor undiminished for several years.

Roses and other flowers, and aromatic plants, may be picked and salted, and kept in that state until a convenient time for distilling, or until enough are gathered to make it an object.

By this method the season does not hurry the manufacture. Vegetables may be distilled in New-York which were gathered in France or Italy, or even in Asia; and the perfumed water or the essential oil will be in nearly as great perfection, both as to quantity and odor, as if the leaves or plants were fresh gathered.

The salting may be performed thus: Take one and a half pounds of rose leaves, or whatever other vegetable substance you choose, add half a pound of salt, and rub them together about four minutes. The friction produced by the salt forcing out the juice of the flower, will reduce the whole to an aromatic paste, which must be carefully collected and kept in a tight vessel in a cool place till wanted for distillation.

When to be distilled, place the paste in the still or retort, with twice its weight of water.

I noticed in New-York, in March last, at a public sale, by Austin, Wilmerding & Co., of drugs and dye-stuffs, a large quantity of articles connected with the line of perfumery, such as rose water, cassia buds, myrrh, frankincense, &c., imported from Europe and Asia, and among them two large packages dried rose leaves; although every other article went readily and at fair prices, yet the rose leaves could not obtain a bid, though some of the first perfumers in the United States were present. Now, had these been preserved in salt, and their value known, they would have commanded a readier sale than any other article offered.

Perfumers, by collecting the leaves of roses, wall flowers, lavender, sweet brier, &c., and packing them with layers of salt, in a tight covered jar, or other suitable vessel, sprinkling with each layer a little powder of cloves and cinnamon in equal parts, may acquire a delightful and refreshing perfume, which will last for years with very little waste, which waste may be supplied by adding fresh leaves on the return of the flowering season.

Nothing on earth can more regale the senses than a beautiful and large display of roses and other ornamental flowers. But this has been hitherto considered as a luxury which could only be enjoyed by the rich, who wholly disregard profit. But if the most brilliant productions of Flora's kingdom can be rendered equally an object of profit as of pleasure, who would not have a flower garden? Every family, almost, can be furnished with a cheap apparatus for distilling, and may thus render pleasure and profit mutual auxiliaries to each other. A. W.

Lansingburgh, 4th August, 1834.

Irrigation.

Although the principles of irrigation have been known from time immemorial—and although ever since we have had aught to do with the Farmer, at least once a year, we have given a few suggestions upon the subject—yet our farmers in this vicinity are slow to practice it, even when they are most conveniently situated for so doing. What is irrigation? It is conveying or applying water where we can do it conveniently for our land There are at least two ways or modes of doing this. One is, by flowing land and covering it with water. Another is, by leading streams of water in circuitous channels around and around, and about and along where you can get it to run. Those who have low lands with a stream running through them can practice the former. And those who have hill farms can practice the latter. One farmer in this town, Mr. M. B. Sears, has tried and is trying the latter method, and we are exceedingly mistaken if he will not be in the end, amply paid for the trouble he has taken to form the proper channels for the water. The operation is exceedingly simple and now is the time to practice it, because now water is the most plenty. Suppose you have a hill side, and the springs above you, and the rills formed by the melting snow and rains are overflowing and coming down upon you. It spreads itself out seeking the depressed places and swales, saturates them with water, soaks your land in those places and up comes the aquatic grasses, or *swale* grasses, as some call them. Now if you should examine the premises—beginning as high as you can, and trace your eye along, you would in a moment see that you could cut a small furrow with your plough, almost level, but not quite, running this way and that as crooked as a serpent, along which you could conduct the water which is now drenching your swales, and thus in effect spread it more equally over your premises, and receive a greater amount of benefit from it,—and whence arises the benefit? You know very well that water is absolutely necessary for the growth of plants; you know very well that the roots supply the branches and leaves, and flowers, with sap; and you know that sap is probably nothing more than water, having the matter necessary for the nutrition of the plant dissolved in it. All water unless it has been distilled, and even that sometimes, holds in solution certain salts and other matters. And these salts and certain matters are the food of plants. Without their being dissolved they cannot get into the exceedingly small pores or tubes of the vegetable. A dry piece of manure might be for ages in contact with a plant and do it no good, but bring water in contact with it, and whatever there may be in it which can be dissolved by water will be dissolved, and changed to a state fitted to pass into the roots and thence over the whole plant and become assimilated and incorporated with it and make the body thereof. Now this being the case, will it not be better to spread this water which would otherwise rush down in a large body together, carrying with it so much nutritive matter and losing it in some bog or swamp or pond, more evenly over the soil? Carry it round in little channels, applying hereby, a little to this grass root, and a little to that, for grass roots, you are aware, make grass tops, and grass tops cut and dried and housed or rather *barned*, make excellent food for cattle during the winter. We know a great many farms in this goodly state of ours, that would be exceedingly benefitted by this practice. Why not get about it then? Why *father* never did and I *won't*.—*Maine Farmer.*

Interesting to Farmers.

The following short history of the origin and process of the application of Plaster Paris, as a manure, may be important to the agricultural interest.

"The first discovery of the utility of Gypsum or plaster Paris, for agricultural purposes, was made by a laborer, engaged in pounding plaster near Hilburn, in Germany. He noticed the extra growth of the grass along the route which he at different times travelled, across a meadow; supposing it to be occasioned by the fine plaster dropped from his clothes, he was induced to try an experiment, to determine the point; it succeeded beyond his expectation; and others tested its usefulness, until all became satisfied of its nutritious qualities; and thus the use of plaster in Germany became general, as a manure, wherever it could be obtained.

"In the year 1768, Jacob Barge, of Philadelphia, having learned the use of plaster in Germany, obtained some from a manufacturer of Burr stones, and scattered it upon a field of clover which proved perfectly satisfactory; in consequence of which, Messrs. Hocker, Lancaster, Clifford, and David Deshler, all respectable farmers near Philadelphia, used the plaster in various ways, and for different plants, and were all equally well satisfied of its utility. The call for, and application of, the article increased: and hence the commencement of a regular trade, upon the seaboard, in the transportation of plaster from Nova Scotia, to all the Southern ports; which has regularly increased, from that period to the present time, and which has become a business as regular and permanent as any other in the United States.

"The directions for the application of plaster, are so various and multiplied, that it is believed no certain general rule can ever be adopted, for it has been found that on some grounds, one bushel to the acre, it better than six bushels; two bushels to the acre, however, appears to be the quantity required for the largest portion of lands in Pennsylvania. No one should be discouraged if no perceptible benefit should result from a trial the first year; for it has been found, that the more slow in its effects, the more certain it is to be advantageous in two, three, and even four years after its application. For clover, grass, &c. it should be sown over the field, just before or after the grass or clover begins to grow in the spring. It is used in the same manner, upon wheat, barley, oats and buckwheat grounds.

"Another mode for grain of all kinds, is, to wet the grain thoroughly, and then mix as much dry plaster with it, as will adhere to the kernel, and immediately strew and harrow in. For corn, throw upon each hill a small table spoonful, as soon as the leaves are formed. From the various experiments made in the Eastern States the fact seems to be well established, that a certain quantity of plaster, used upon all dry soil, and on low grounds in dry seasons, is of the utmost importance and adds greatly to the growth of every kind of vegetable substance intended for the use of man or beast. The only sure direction therefore for using the plaster, is for each person to ascertain by experiments the quantity required for a particular parcel or kind of ground which it may be desirable to enrich and fertilize. On very dry grounds it may be advisable to wet the grain and mix plaster as above directed; and after harrowing, to strew on the top of the ground thus sown, in a damp day, about one bushel to the acre."—*Ohio State Journal.*

Richardson's and Fuller's Odometer.—This is an improvement on the Odometer, or machine for measuring distances, and is designed to be attached to carriages, in order to tell the distance travelled. It is a combination of the cog wheel and endless screw, the wheels and screws are enclosed in a small brass box which is attached to the axletree. A level projects one of its ends from the box; the other end being flattened and resting on a ratchet wheel,—a nub or projection from the hub of the carriage, strikes the lever during each revolution, and thereby it pushes the ratchet or "*rag wheel*," on the shaft of this is a cog wheel which works on an endless screw. On the shaft of the screw another cog wheel, which works another endless screw, on the end of which is an Index on the outside of the case, and moves around a graduate circle, and thus designates the distance traveled. It is so arranged that one index performs its revolution around the dial, once every 60 miles and the other once every 700 miles. The inventors reside in Brunswick, and have secured the right. It will be a very convenient article for those who keep carriages to let, as they will thereby ascertain to a mathematical certainty the distance they have run.—*Maine Farmer.*

Hammering Stone.—A physician of this city has invented a machine, recently patented, for hammering and facing granite, or any other kind of building stone. The mechanic who constructed a model for the patent office, at Washington informs us that he considers it in the light of a happy discovery, as faced stone may be shortly afforded as cheap as brick. A number of hammers, weighing not far from twelve pounds each, are set in motion either by steam or water power and move with such rapidity that the fragments fly like dust in a windy day. All the hammers move diagonally across the stone, in two directions, thereby completely levelling and smoothing it by simply passing the block onward under them and back again. One of these machines, on a large scale is being erected at South Boston. Should it answer the expections of the inventor, the old fashioned method of hammering stone will be wholly neglected as one machine will accomplish as much in a day as twenty or thirty men.—*Scientific Tracts.*

From the New York Farmer.

Experiments on Bone Manure.

Mr. John Hornby: Sir—Yours of the 5th inst. is at hand, and in reply to your questions respecting the use of bone dust as a manure, I would say:

1st. That I have used bone dust both on a light and on a heavy loam, without any perceptible difference in its effects.

2d. That I planted my corn in drills 5½ feet apart, strewing the bone dust in the drills at the rate of 16 bushels per acre—the corn very good. I also planted in drills, two rows manured highly with hog-pen and yard manure, and two rows with fish, neither of which are equal to the corn manured with bones.

3d. I manured about an acre of grass with 25 bushels of bones spread broad cast, and found it in effect superior to any other manure I had before used for that purpose; the grass grew most luxuriantly, and was fit for the scythe two or three weeks sooner than any other around it.

4th. I also used it broadcast on oats at the rate of 25 bushels per acre. Its effects, by those who witnessed it, were said to be superior to farm-yard manure.

5th. From want of time to prepare it, I have not tried it in compost, but should suppose its effects in that way would be more immediate, from its having undergone a previous fermentation in the compost heap.

For trees I have found bone dust a most excellent manure. Yours, respectfully,

JOHN R. WATSON.

Perth Amboy, August 9, 1834.

Salting Butter.

The quantity of salt for butter that is not to be eaten for several months after salting, should not be les than half an ounce of salt, mixed with two drachms of sugar and two drachms of niter, to sixteen ounces of butter. The sugar improves the taste, and the niter gives the butter a better color, while both of them act with the salt in preserving the butter from rancidity. If the salt is not minutely mixed into the butter, that on which it rests will have a yellow or brownish color, while the rest will be of a white color, which, in dairy language, is termed "piety butter," that brings an inferior price. But although the butter has to be kneaded among, and the salt well mixed into it, care must be taken not to bake or knead it too much, otherwise it will become tough and gluey.—*Quar. Journal.*

The Lawton Hybrid--a new Turnep.

We have to introduce to the notice of agriculturists another new and valuable turnep for field culture. This variety is a hybrid between the *green-topped Swede* and the *green-topped white Globe*, raised by James Wright, Esq. of Lawton, Strathmore, Perthshire. Hence the name. From trials which have been made in various parts of the country during the last season, this variety seems deserving of cultivation. It is a white turnep with a green top, and possesses the advantage of being hardier, and yielding a greater crop, than any other of the white turneps at present cultivated in the fields, qualities which render it well worth the attention of farmers.—*Ib.*

Ploughing Match.

At West Galway, in this county, on the 20th ult. a *Ploughing Match* took place in the presence of a number of spectators. The competitors, though few, (being only six in number) were yet allowed by all who witnessed the exhibition to be very superior. The anxiety manifested by each to excel, and the consequent keenness of the contest, excited a lively interest in the minds of all assembled.

The following gentlemen being appointed judges: R. Campbell, Wm. McFarlane and Wm. Graham, awarded the first premium to Mr. John Maxwell, in the employment of Dr. Daniel James. The second to Wm. Gemmel, farmer. The third to Wm. Jaxson, farmer.—*Ballston Spa Gazette.*

The Annat Barley--a New Variety of Barley.

This new and seemingly very superior variety, is the produce of three ears which were picked by Mr. Gorrie, Annat Gardens, in a field on the farm of Flawcraig, Carse of Gowrie, Perthshire, in the harvest of 1830, since which period it has been grown at Annat Gardens. Hence its name. Last season it was sown on a ridge in the middle of a field with *Common* barley on the one side, and *Chevalier* on the other. In bulk of straw it seems to have the advantage of both these kinds; it was five days earlier ripe than the former, and about a fortnight before the latter; and it was also 2½ lbs. per bushel heavier than the *Chevalier*. From the *Annat Barley* being of so recent introduction, it will be two years at least before a sufficient quantity of seed can be procured to render it the subject of extensive cultivation.—*Editor Q. J. A.*

KNITTING MACHINE.—In a late number of the New England Farmer, there is a description given of a machine then exhibiting at the Agricultural Warehouse, Boston. It is represented as a small, neat machine, by which persons in indigent circumstances, and children, may be employed to great advantage. It occupies about a cubit foot, and is operated upon by a turning crank, which requires no more power or skill than a common hand organ, except when necessary to widen or narrow, when a stitch is dropped or added by hand. The machine does the work of *six expert knitters*, is very simple, and the work is done with astonishing rapidity and precision. It is said to be superior to the stocking loom, and can be worked by any intelligent child after a few minutes instruction. It is capable of knitting wool, cotton, silk or linen.

TRUTH.—From the following beautiful passage from Plato, it will be seen that that wise philosopher ascribed the uncertainty and disappointment which accompany the search after *Truth*, not to the imperfect nature of things themselves, but to the imperfection of the human faculties:

"If we are unable to discover truth, it must be owing to one of two reasons; either that there is no truth in the nature of the things themselves, or that the mind of man is from some radical defect, unable to discover it. Upon the latter supposition, the uncertainty of human opinions may be fully accounted for; and therefore we ought to ascribe all our errors to the defectiveness of our own minds, and not to affirm, gratuitously, that there is any defect in the nature of things. Truth is frequently difficult of access; and therefore, to arrive at it we must proceed with caution and diffidence, examining carefully every step we take; yet after all our efforts, we shall often find ourselves disappointed, and forced to sit down, confessing our ignorance and our weakness."

Turnep Seed.

RUTA Baga or Yellow Swedish, Large White Flat or Globe, Large English Norfolk, Long Tankard or Hanover, Early White Flat Dutch, Long Yellow French, White French or White Swedish, Yellow Maltese, Dale's New Yellow Hybrid, and various other kinds for sale at the Rochester seed store.

REYNOLDS & BATEHAM.

A Valuable Farm For Sale.

THE valuable FARM owned and occupied by Elias Beach, 4 miles west from the city and situated directly on the Erie Canal, containing 240 acres of good wheat and grass soil, well watered, with good house, barns, out houses, &c. Five thousand dollars will be required in cash, and the balance may remain on bond and mortgage for a term of years. Title indisputable. The price per acre may be learned on inquiring of JAMES H. WATTS, at No. 3 Exchange-street, Rochester, and the owner will at all times be ready to give further particulars on the premises. ap 18-tf

Red Corn and Timothy Seed.

A FEW bushels just received at the Rochester Seed Store.

REYNOLDS & BATEHAM.

may 30-tf

FLOWER SEEDS.

A SPLENDID assortment of Annual, Biennial and Perennial Flower Seeds, put up in small papers at 6 cents each, or 20 varieties for $1, and 100 varieties for $4, for sale at the Rochester Seed Store.

REYNOLDS & BATEHAM.

may 5-3w

150 lbs. Lucern Seed,

OF fine quality and proved vitality, for sale at a reduced price, at the Rochester Seed Store.

Also, A few thousand SILK WORM EGGS, just received and for sale as above.

REYNOLDS & BATEHAM.

May 1, 1835. may 2-tf

Robbins' Patent Planting Machine.

WITH this machine Corn, Beans, Peas, and all seeds of an oval shape can be planted with more system and correctness than can be done in the usual manner of planting with the hand and hoe.

One acre of ground can be planted, placing the seeds any given distance apart, from two or more inches, and rows two and a half feet between, in three hours time.

Machines can be had by applying to C. N. BEMENT, Treasurer of the State Agricultural Society, Albany; BUSHROD BUCK, Lanesborough, Berkshire county, Mass.; and DANIEL I. BUCK, Lowville, Lewis county, agent and proprietor for making and vending said machines, at all of which places it is intended to keep a supply on hand.

☞ The above machines are for sale at Reynolds & Bateham's Seed Store Rochester.

Lowville, March 25th, 1835. ap 14-tf

Monroe Horticultural Garden & Nursery.

THE subscriber offers to the public a choice selection of Fruit Trees, of French, German, English and American varieties, consisting of Apples, Pears, Plums, Peaches, Cherries, Apricots, Nectarines, Quinces, Currants, Gooseberries, Raspberries, Strawberries, Ornamental Trees, Shrubs, Plants, Hardy Roses, Vines, Creepers, Herbaceous Perennial Plants, Bulbous Roots, &c. &c.

ALSO—A few hundred of the Morus Multicaulis, or Chinese Mulberry, the White Italian Mulberry by the hunbred or thousand, Grape Vines of both native and foreign varieties, mosty of large size, for sale by the single vine, hundred or thousand, at reduced prices. The subscriber has a large collection of Green-House Plants of choice and select varieties, and in good condition.

☞ Orders for *Mr.* Rowe's Nursery received by the Publisher of this paper.

Catalogues will be sent to those who wish them, gratis, or may be had by calling at the office of the Genesee Farmer. ASA ROWE.

Greece, *Monroe* co. N. Y. Sept. 13, 1834.

Rochester Seed Store & Horticultural Repository.

No. 5 *Arcade Hall, next door but one to the Post-Office.*

REYNOLDS & BATEHAM, having completed their assortment, now offer to the public the best and most extensive collection of Garden, Field and Flower Seeds, ever before offered in the Western country.

Their stock is entirely new, and having been purchased directly of the growers and importers, the vitality and purity of the seeds are expressly guaranteed. Farmers and Gardeners will find a great variety of new and valuable Seeds not heretofore introduced into this section of country.

They have also an assortment of superior Horticultural Implements, Books, &c.

Merchants and others supplied with assortments of Seeds for retailing at a liberal discount.

All orders for Seeds, Fruit or Ornamental Trees, Shrubs, Grape Vines, Green-House Plants, &c. &c. by mail or otherwise, will meet with prompt attention.

Cash will at all times be paid for Grass and Clover Seed, Peas, Beans, &c.

A large and comprehensive Catalogue of the Establishment is just published, and will be furnished gratis on application. mar 10

Biographical Sketch.

BY W. W. E.

The following biographical sketch we copy from an article in the British Critic, a review of a volume entiled "Lives of Eminent Christians," by the Rev. T. B. Hone, London, 1833. Should the reader enjoy as much satisfaction as we have in the perusal of it, he will be amply compensated for the time spent in reading it. We see in the individual who is the subject of it, how congenial are rural pursuits, in the several branches of Agriculture, Horticulture, Floriculture, and Arboriculture, with the cultivation of a refined moral sensibility, and the cherishing of an enlightened, sober, and fervent piety. We see, too, how much a fondness for rural scenery and rural pursuits, in a cultivated mind, may do, not only towards increasing the sources of our innocent pleasures, but conferring actual and lasting benefits upon mankind.

The subject of this biography is Evelyn, who lived in the 17th century, and was the cotemporary and friend of Mr. Boyle, "that pious, admirable Christian, and excellent philosopher, who honored him with his particular esteem for nearly 40 years."

"His early days were passed in the beautiful scenery of his father's estate at Wotton. The house," says his biographer, "is large and ancient, and so sweetly environed with those delicious streams and venerable woods, as in the judgment of strangers, as well as Englishmen, it may be compared to one of the most pleasant seats in the nation. It has rising grounds, meadows, wood and water in abundance. Here, amid the gardens, fountains and groves, by which the mansion was adorned, young Evelyn imbibed the love of rural pursuits and country pleasures, which imparted so healthful a tone to his future life, and which never forsook him. It was therefore a cause of great rejoicing to him when he was enabled to purchase the sequestered estate of his father-in-law, Sir Richard Brown, at Sayes Court, near Deptford. To this 'green retreat' he retired from the tumult of the world, beguiling his time with the conversation of his religious and literary friends, and in the bosom of an affectionate family.

"Friends, books, a garden, and perhaps his pen,
Delightful industry employed at home,
And nature in her cultivated trim,
Dressed to his taste, inviting him abroad:—
Could he want occupations who had these?"

"The tastes of his wife, whom he had married at a very early age, were in perfect harmony with his own; she was his companion in the study and the garden, aiding and cheering him in all his occupations. On his arrival at Sayes Court, he found nothing there, to borrow from the narrative of his present biographer, but 'a rude orchard;' the rest of the estate was 'one entire field of a hundred acres.' His first step was to set out 'an oval garden,' which he says was 'the beginning of all the succeeding gardens, walks, groves, enclosures and plantations there.' Soon after he laid out an orchard, and in the course of time planted every hedge and tree, not only in the gardens and groves, but about all the fields and house, since 1563, except those large old and hollow elms in the stable yards, for it was before all one pasture field to the very garden of the house, which was but small. 'From which time,' Evelyn adds, 'I repaired the ruined house, and built the whole end of the kitchen, the chapel, buttery, my study above and below, cellars, and all the out houses and walls, still house, orangery, and made the garden, &c. to my great cost.'

"The principles of ornamental gardening, Mr. Home remarks, which now give beauty to our country villas, were not understood in those times. Art had not yet been placed under the tuition of nature; but the taste of the English, (agreeing with that of the Italian and French,) was pleased with long strait walks and flower beds, cut out in corresponding figures—round, square and oval—with evergreens cut into fantastic shapes, and clipt hedges to form the boundary. Milton alone, says Horace Walpole, seems, with the prophetic eye of taste, to have conceived to have foreseen modern gardening; and in describing Eden, he speaks of the river which, with many a rill, watered the garden, and fed

"Flowers worthy of Paradise, *which not nice art*
In beds and curious knots, but nature boon
Poured forth."

"We think these lines go to establish the converse of the argument pursued by Walpole, and adopted by Mr. Hone; for though the poet does somewhat disprovingly allude to the 'nice art' which shaped the flowers into 'beds and curious knots,' yet the garden which he goes on to portray as 'a place of various view,' with 'lawns on level downs interspersed among 'groves of rich trees,' with caves

"Of cool recess, o'er which the mantling vine
Lays forth her purple grape, and gently creeps
Luxuriant,"

is not in reality a garden answering to the modern idea attached to the expression. It is in fact such a scene as might have been suggested to the mind of Milton by some romantic vision of luxuriance in Italy. Be this as it may, the garden in Sayes Court was as stiff as any of its contemporaries, of which the reader may soon satisfy himself by referring to the picture of a similar garden, given in Evelyn's Memoirs. But if it be faulty in the eyes of a modern critic, it was not so in the estimation of its amiable artist. Here he employed himself in cultivating his flowers with an enthusiasm which induced the poet Cowley to say, that he knew no person who derived more happiness from a garden. Here, too, the materials of some of his most valuable works were collected. A study of the 'trees of noblest kind for sight, smell and taste,' enabled him gradually to prepare his *Sylva;* and his orchard furnished him with the facts he afterwards embodied in his *Pomona.* To prove that he was not above the humblest office of a gardener, he wrote also *A Discourse on Salads.* It is gratifying to know that his piety grew with his rural learning.

"'It is,' he says, 'a transporting consideration to think that the infinitely wise and glorious Author of Nature has given to plants such astonishing properties; such fiery heat to warm and cherish; such coolness in others to temper and refresh; such pinquid juice in others to nourish and feed the body; such quickening acids to compel the appetite, and grateful vehicles to court the obedience of the palate; such vigor to support and renew our natural strength; such ravishing flavor and perfumes to recreate and delight us; in short, such spirited and active force to animate and revive every faculty and part, to all the kinds of human, and I had almost said, heavenly capacity too.'

"Mr. Hone was very happy in his choice of Evelyn for his 'Lives of Eminent Christians,' for in him we do indeed behold 'the man of taste, the philosopher, and the acquaintance of princes, bowing at the foot of the cross, desiring to walk in the ordinances and commandments of the Lord blameless, and confessing that the Gospel of Christ is his comfort, his pleasure, and his glory.' In his life, also, piety wears so sweet and unassuming an aspect, and mingles so unaffectedly in all his joys and sorrows, prosperity and disappointments, that she cannot fail of winning many hearts. The religion of Evelyn is neither morose, nor bigoted, nor fanatical. He was not afraid to worship the Almighty in the beauty of his works. He may be said with truth to have looked from nature up to nature's God, for the mighty forest and the humble garden, were equally his delight. The yellow primrose by the river's brim was more than 'a yellow primrose to him,' for he discovered in it the workmanship of a Divine Architect, and recognized the power of the Deity in the smallest drop of silver dew that glitters on its bosom.

"The old age of Evelyn cannot be described in any language more graceful or touching than Mr. Hone's. 'On entering his eighty-fourth year, he looked back with thankfulness upon the mercies of God, and particularly expressed his gratitude for his exemption from so many of the sorrows common to old age; he also prayed for pardon of his sins, and for grace to prepare him for a better life.' Soon after, on a Sunday, when the wet and uncomfortable weather prevented him from attending Church, his good friend Dr. Bohun 'officiated in the family, and made an excellent discourse on 1 Cor. xv. 55, 56—of the vanity of this world and uncertainty of life, and the inexpressible happiness and satisfaction of a holy life, with pertinent inferences to prepare us for death and a future state.' 'I gave him thanks,' he adds, 'and told him I took it kindly as my funeral sermon.' But he lived to see two birthdays more, continuing to the very last to number his days so that he might apply them to wisdom, until at length, full of years and full of virtue, he 'fell asleep on the 27th of February, 1706,' and directed this beautiful aphorism to be inscribed on his tomb: '*That all is vanity which is not honest, and that there is no solid wisdom but in real piety.*'

"In the portrait of Evelyn he is represented as holding a copy of his 'Sylva' in his hand, and it is by this work that his literary fame will be preserved. The 'Sylva' was originally a paper read before the Royal Society, and Mr. Hone might have added, that it was the first book published by that body; its effect upon the popular mind more than realized the most ardent expectations of the author. Mr. Hone has quoted a passage from Wither's 'Emblem,' in which the poet complains of the 'havoc and the spoil,' then made in every part of the island, among the 'woods and the groves.' Wither was an enthusiast in the admiration of wood scenery, and often took occasion to deplore the destruction of the rich beech woods of his native village. The desolating civil war, and the consequent anarchy and depression, had contributed to increase the ravages of time and decay. The old forests were rapidly disappearing from the face of the country. Evelyn derived great satisfaction from the success of his work. 'Infinitely beyond my expectation,' he says in one of his letters, 'it has been the occasion of propagating many millions of useful timber trees throughout this nation, as I may justify without immodesty, from the many letters of acknowledgment received from gentlemen of the first quality, and others altogether strangers to me. His Majesty, Charles the Second, was sometimes graciously pleased to take notice of it to me, that I had by that book alone incited a world of planters to repair their broken estates and woods, which the greedy rebels had wasted and made such havoc of.'

"Evelyn felt like a man who knew himself to be a benefactor of his country. While Britain retains her awful situation among the nations of Europe, remarks Mr. D'Israeli, the Sylva of Evelyn will endure with her triumphant oaks. It was an author, he adds, in his studious retreat, who, casting a prophetic eye on the age we live in, secured the late victories of our naval sovereignty. Inquire at the Admiralty how the fleets of Nelson have been constructed, and they can tell you that it was with the oaks which the genius of Evelyn planted." W. W. E.

Painting.

Repeated experiments show that paint put on houses late in autumn, or in winter, will last far longer than that put on in warm weather. In cold weather the oil dries on the clapboards, and with other ingredients forms a durable body, but in hot weather the boards absorb the oil, and what remains on the surface has but little substance.

Curious Ink.

Dissolve sal-ammoniac in water, and write with it; it will be invisible; heat the paper by the fire and it will become black.